

Governor's Water Augmentation Council

Desalination Committee

September 11, 2017 Meeting Summary

Time: 2:00pm – 3:00pm

Location: Arizona Department of Water Resources

Welcome and Introductions

Chairman Robert Lotts called the meeting to order and welcomed those in attendance. All participants introduced themselves individually. The following member of the Governor's Water Augmentation Council (GWAC) was present: Wade Noble.

Recapitulation of Previous Meeting with the Arizona Municipal Water Users Association

Chairman Lotts discussed a meeting that he attended with West Valley members of the Arizona Municipal Water Users Association. Many of the represented municipalities are also members of the West Valley Water Association, formerly known as WESTCAPS. The municipalities in the West Valley expressed an interest in desalination of brackish groundwater as a possible option for a water supply but it was noted that the timing differed for each municipality. It was also noted that the challenges associated with this option include brine disposal and affordability.

ADWR Presents a Status Update on the SRV Groundwater Flow Model

Hugo Perea, a groundwater modeler for the Arizona Department of Water Resources (ADWR), gave a status update on the Salt River Valley Groundwater Flow Model. Mr. Perea presented general information about the "Phoenix AMA Groundwater Flow Model" and stated that a benefit of this new model was that two artificial boundary conditions that existed in previous models (the ADWR SRV Model and the Brown & Caldwell Hassayampa Model) were removed so that incorrect assumptions when making projections in the Hassayampa area could be avoided. Mr. Perea discussed: 1) the development process; 2) the current model extent (which now includes the Hassayampa area in addition to the existing domain of the SRV); and 3) new model features (the simulation of unsaturated flow; inclusion of water released from interbed storage; inclusion of steady state initial conditions circa 1900, etc.). He reviewed an estimated model development schedule and stated that the completion of this model is estimated to occur in the year 2019. Mr. Perea's presentation can be found [here](#).

Bureau of Reclamation Presents West River Valley Basin Study

John Rasmussen, a Water Resources Planner with the U.S. Bureau of Reclamation, discussed some of the particulars of the West Salt River Valley Groundwater Flow Model which is being created under contract with Southwest Groundwater. The model integrates the existing Salt River Valley Model (Freihoefer, et al, 2009) and the Lower Hassayampa Sub-Basin Model (Brown and Caldwell, 2006) and is being developed as part of the West Salt River Valley Basin Study. The goal of the study is to assess future water demand and supplies in the West Valley, including the effects of climate change. The study must

also define and assess alternatives to meet the future water demand in the West Valley as well as providing a “trade-off” analysis which entails an economic evaluation of the alternatives developed to meet that future water demand. The model area includes the Buckeye Waterlogged Area and can be used to run various predictive scenarios from the current year to 2060. Mr. Rasmussen informed the committee that the model report is in preparation and likely will be accessible to the public within the next few months.

Discussion on the Buckeye Waterlogged Area

Chairman Lotts asked ADWR staff about the possibility of extending the designation of the Buckeye Waterlogged Area for several decades. Frank Corkhill, Chief Hydrologist at ADWR, did not believe this was possible because of the numerous factors that could change the complexion of the water use in that area. Therefore, any designation of the waterlogged area would likely be reevaluated every 10-15 years and should be tied to groundwater monitoring. ADWR staff also informed audience members that the model development process (i.e., calibration) is independent from model-use for planning purposes, and further stated that stakeholder input will be very important for projective purposes.

Chairman Lotts recommended that the committee approach the Buckeye Waterlogged Area from the perspective of how long the supply of brackish groundwater would last in order for an investor to receive a return on investment and the legal issues involved with accessing that supply.

Items for GWAC Meeting and Next Desalination Committee Agenda

Items for the Governor’s Water Augmentation Council

The Desalination Committee will review with the Governor’s Water Augmentation Council its engagement with the AMWUA members, a review of the groundwater modeling discussion on the West Salt River Valley, and a prioritized table of the areas of focus for the committee including: the Winslow-Leupp Area, the West Salt River Valley, the Yuma Desalination Plant, and the Yuma Brackish Groundwater Mound. The committee will also note that the committee chair has started engaging with stakeholders.

Items for Next Desalination Committee Meeting

Chuck Cullom, a representative of the Central Arizona Water Conservation District, proposed to share the results of the study commissioned by Central Arizona Project with Black & Veatch and CH2M with a focus on the Yuma area.

John Rasmussen agreed to share the results of the West Salt River Valley Groundwater Flow Model with the committee upon its release to the public.

Schedule the Following Meeting and Closing Remarks

The committee agreed that, for the time being, all four areas of focus will need to be addressed simultaneously due to the numerous constraints and factors involved with each. Chairman Lotts mentioned that although one of the four areas may be prioritized, this would not necessarily be followed by dismissal of the other areas.

The date and location for the next Desalination Committee meeting will be determined.